ON A COLLECTION OF BIRDS MADE BY MR. M. NAMIYE, IN THE LIU KIU ISLANDS, JAPAN, WITH DESCRIPTIONS OF NEW SPECIES.

By LEONHARD STEJNEGER.

A short time ago the National Museum received a fine collection of birds from the Educational Museum of Tokio, Japan, the director of which is Mr. S. Tegima. Besides numerous interesting and well-prepared specimens, especially from the provinces southwest of Tokio, there were several skins from Liu Kiu. At the same time, Mr. M. Namiye, in charge of the ornithological department of the Educational Museum, forwarded to me for inspection another lot from the same islands.

The Liu Kiu, or Riu Kiu, Islands (often spelt Lew Chew, or Loo Choo), in connection with the Linschoten Archipelago, form a continuous chain of islands between Kiu-Siu, the southern of the Great Japanese Islands proper, and the northern end of Formosa. Notwithstanding this intermediate position between two so peculiar and remarkable zoogeographical provinces, only little has been done in order to explore their fauna. That of the Linschoten group is wholly unknown, and what little we know of the birds of the Liu Kiu Islands is due to the American Pacific Exploring Expeditions under Perry and Rodgers.

The Liu Kiu Archipelago consists of three groups, a southern, the Miyaco Islands, or Nambu Sioto, south of 25° north latitude; a middle group, Tsubu Sioto, or Liu Kiu proper, between 26° and 27° north latitude, and a northern group, Hokubu Sioto, between 27° and 29° north latitude.

The first and the last named of these groups have apparently never been visited by naturalists, for the ornithological collections, at least, have only come from the main island of the middle group, Okinawa Shima, or Great Liu Kiu. The present collection was also made on this island during a short visit of Messrs. Tegima and Namiye during the month of March of the present year. Official business of more pressing nature prevented Mr. Namiye from devoting so much time to collecting as he wanted. This is much to be regretted, for when we look at the excellent results of his short stay, there can be no doubt but that he would have added more species to the Avifauna of the Japanese Empire. It is also desirable that the southern group should be explored, since situated, as they are, even more southerly than the northern point of Formosa, pretty well isolated, and not far from the Tropic of Cancer, many interesting novelties and additions to the fauna may be expected to occur on these islands, which, moreover, seem to be very mountainous, the mountains reaching a height of at least 600 meters.

Okinawa Shima, or Great Liu Kiu, is a long and narrow island, its greatest length in a southwest-northeast direction being nearly 60 miles. It is well cultivated in the southern part, about the chief city called Napa or Nafa, but further north it becomes rugged and mountainous and covered with forests.

Turnix blakistoni SWINH.

The discovery of this little quail-like bird on Japanese territory adds not only a species and genus to the list of Japanese birds, but a whole superfamily, *Turnicoideæ*, or *Turnicomorphæ* as the group is called by some ornithologists who consider it worthy of rank as an order.

I am somewhat doubtful in regard to the specific name, for Swinhoe's decription, if it can be called a description, is very short and unsatisfactory, and I have no Chinese specimens for comparison. Here is what he says (P. Z. S., 1871, p. 401):

"A male specimen of the *T. ocellata* group was procured by Captain Blakiston at Canton, and kindly given to me. This differs too much from the last [*T. rostrata*] for me to consider it of the same species. Its nearest ally is the *T. pugnax*, Temm., of Malacca, but it is smaller, shorter-toed, and possesses a remarkably small bill. Instead of spots it has numerous bands across the breast, and its upper parts are very rufous. I propose to separate it under the name of its discoverer."

I have before me a pair of "*T. pugnax* from Malacca" (U. S. Nat. Mus., Nos. 15176 and 15177), or *T. plumbipes* HORSF., as it ought to stand according to the opinion of the Marquis of Tweeddale, who considered it distinct from the typical *T. pugnax* from Java, from the male of which the bird from Liu Kiu differs in the following points:

(1) It is considerably smaller, with somewhat smaller bill and feet.

(2) Its forehead differs distinctly from the crown in being buffish white with black streaks, the crown being dark rufous with blackish centers, and a light median stripe.

(3) On the upper parts the ground color is much more rufous and the light marks more buffy.

(4) It is less heavily banded on the flanks.

So far as the description goes, the Liu Kiu bird, therefore, agrees tolerably well with the characters ascribed by Swinhoe to his *T. blakistoni*. I should remark, however, that the Indian form, which Mr. Hume calls *T. taigoor* SYKES, also seems to differ from *plumbipes* chiefly by the rufous tint of the upper parts (cf. Hume, Stray Feath., VI, 1878, p. 451).

The occurrence of a Hemipode on Japanese territory is not very surprising, since a species of this family has been found on the opposite mainland as far north as Ussuri (latitude of northern Yesso).

The following description of the Liu Kiu specimen may not be out of place:

♂ ad. *Napa, Okinawa Shima, March* 29, 1886. *Coll. M. Namiye.*—Forehead whitish, slightly tinged with buff, each feather marked longitud-

inally with black; superciliary streak, lores, cheeks, malar region, ear-coverts, and upper lateral portion of neck similarly colored, the brownish black markings, however, occupying the tip of the feathers, forming semi-lunar, scale-like marks on the side of the neck; a distinct light hazel-colored spot behind the ear-coverts; chin and throat white, slightly suffused with buff, unspotted; feathers of the crown and nape black with broad hazel-colored tips, those nearest to the supercilium with a light mark in the outer web, and those nearest to the middle with a similar, but larger buffy white spot, forming a conspicuous light median line from the forehead to the neck; lower lateral portion of neck of a dull hazel inclining to cinnamon, and but faintly mottled with dusky; ground color of scapulars, and entire back, including rump and upper tail-coverts, of a raw umber somewhat irregularly overlaid with hazel inclining to rusty, and more or less conspicuously mottled and waved with blackish, the shoulder feathers and longest rump feathers in the outer web marked with a distinct buffy spot which is set well off from the rest of the feather by a black line or spot; ground color of under parts creamy buff, becoming tawny buff on the flanks, crissum and under tail-coverts, the feathers of the fore-neck, upper breast, and sides of the breast each with a subterminal transverse spot of black, forming a series of interrupted cross-bars, and most of the feathers also with a very narrow blackish edge to the tips; primaries dusky, fading into brownish gray toward the tip, the outer webs with light edges, which are particularly well defined, and nearly white on the outermost pair; secondaries similarly colored, but the edges more tinged with buff and the tips inclining to cinnamon, the inner ones in the outer webs showing trace of buff cross-bars as an indication of the markings on the tertiaries, which are hazel mottled with dusky and adorned with several transverse marginal spots of a light buff irregularly bordered by brownish black; primary coverts like the primaries; great secondary coverts similar to the tertiaries, but the hazel inclines to cinnamon, the buff occupies nearly the whole outer web, and the dark markings assume more the character of regular cross-bars; the smaller upper coverts similarly colored on both webs, the smallest ones with only terminal buff spot and a subterminal black one, nearly obsolete in those nearest to the edge of the wing; largest feather of the alula dusky with a broad and well-defined buffy white edge to the outer web; under wing-coverts and axillaries ashy gray, those nearest to the edge and the tips of the axillaries strongly washed with cinnamon; tail-feathers like the elongated rump-feathers and difficult to distinguish from the latter. Bill and legs appear to have been of a bluish horn-color, the gonys light yellowish.

Dimensions.—Total length 140^{mm}, according to the measurement of the fresh bird by the collector. Wing, 73^{mm}; tail-feathers, 26^{mm}; exposed culmen, 12^{mm}; tarsus, 24^{mm}; middle toe with claw, 20^{mm}.

It may be well to remark that the individual variation as to color is very great in the Hemipodes, and that the females of the present group are larger than the males, and have the chin, throat, and fore-neck uniform blackish.

Treron permagna, sp. n.

DIAGN.—Rectrices underneath uniform slate black, the tips bordered with ashy; tail slightly graduated; third primary sinuated in the inner web; under tail-coverts dark-olive green broadly bordered with pale creamy yellow; secondaries and their great coverts narrowly edged with the same; primary coverts uniform blackish; lower abdomen of a creamy primrose-yellow; rest of plumage dull olive-green above, clearer on the rump, clear yellowish oil-green on forehead and under parts. Size very large: wing over 200^{mm}.

TYPE.—No. 17, Coll. Namiye; Napa, Okinawa Shima, Liu Kiu Islands, March 9, 1886.

HABITAT.—Okinawa Shima, middle group, Liu Kiu Islands, Japan.

The identification of the present species has caused me considerable difficulty. It is much larger than *Treron formosæ* SWINHOE* from Formosa, being, so far as I can see, the largest species in the whole genus *Treron* in its widest sense, though otherwise evidently closely resembling the female of that species. But the specimen before me, which Mr. Namiye collected at Napa, March 9, 1886, is marked on the label as being a male. Should the determination of the sex be correct, the present species would be unique amongst its nearest allies in having the small upper wing-coverts olive-green in the male and not chestnut.

But even if the specimen be a female, it differs sufficiently from Swinhoe's description of the types of his *T. formosæ* to warrant the separation.

First, as to dimensions: His female has the wing 7.2 inches long and the "tail" 4 inches, while Namiye's bird measures, wing 8.3 and tail 6 inches! It is consequently much larger even than the male *T. formosæ*, which, according to Swinhoe, has the wing 7.8 and the tail 5 inches, with a graduation of 0.5 inch, while in *permagna* the latter measurement is nearly 1 inch. It should also be remarked that my mode of measuring gives the smallest possible dimensions, for the wing is not flattened, and the tail is measured by thrusting the point of the dividers between the central tail-feathers down to the base.

In general coloration my bird agrees tolerably well with Swinhoe's description (when we remember that "*yellow* on the head and rump" is a misprint for "*yellower*"), except that it has the throat uniform with the rest of the under parts, and not "grey, each feather margined with yellowish green." In the details, however, there seem to be some differences, which will be apparent from the subjoined full description of

* Ibis, 1863, p. 396, and 1866, p. 312; nec *Sphenocercus formosæ* SWINHOE, Ibis, 1866 p. 122, quæ *T. sororia* SWINH.

T. permagna. In regard to the coloration of the wing the discrepancies are very considerable, as will be seen from the following comparison:

T. formosæ ♀.	*T. formosæ* ♂.	*T. permagna.*
"Primary coverts and secondaries black, margined with clear yellow. "Tertiaries and other coverts green, some of them being likewise margined."—Swinh., Ibis, 1863, p. 397.	"The primary coverts with more or less greyish black, margined with yellow." "Outer tertials greyish black, narrowly edged with green and light yellow; the rest of the tertials the color of the black."—Swinh., Ibis, 1866, p. 312.	Primary coverts uniform black, without light edgings. Secondaries edged with yellowish. Tertiaries uniform olive green, without light edges. Six outer great secondary coverts edged with yellowish. No other coverts light edged.

I have a strong suspicion, however, that Swinhoe has not named correctly the parts he described. I believe that by "*primary coverts*" he really meant the "*great secondary coverts*," and that, in the description of the male, by "outer tertials" he meant "outer secondaries." The fact remains, however, that in the females he describes two sets of coverts as having yellow edges, while in the bird before me only the outer great coverts are colored in such a manner.

The following is a careful description of the type of *T. permagna.*

♂ (?) *Napa, Okinawa Shima, March* 9, 1886. *Coll. Namiye.*—Upper parts dark olive-green, clearer on the rump and hoary on occiput, cheeks, sides of neck, cervix, and interscapilium; forehead, anterior part of crown, and lores, like the under parts, clear oil-green, gradually deepening backwards to the abdomen into olive green; middle of lower abdomen and crissum of a delicate creamy crimson yellow; feathers covering tibia and sides of abdomen olive green, edged with a similar yellow; under tail-coverts, the longest of which reach beyond the tips of the lateral rectrices, dark olive green, broadly (about 5^{mm}) margined with pale creamy yellow; sides of breast, axillaries, as well as the whole under side of the wing, dark slate, with a somewhat glaucous gloss to the under side of remiges; upper side of the remiges brownish black, the outer webs towards the edge washed with olive green; second, third, and fourth primaries distinctly, but very narrowly, edged with pale yellowish in the middle portion of the outer web; the outer webs of the six outer secondaries similarly edged, though somewhat broader and in the apical half only; the corresponding greater coverts colored exactly similarly; tertiaries and all the other upper coverts uniform olive green, with a scarcely perceptible purplish wash on the smaller ones, except the primary coverts, which are uniform blackish brown, without light edges; tail above olive green, the central pair of tail-feathers uniformly so, the rest with the inner edge slaty black (about 7^{mm} wide); under side of tail slate black, each feather tipped with ashy on the portion not covered by the succeeding one. In the dried skin the bill is light horn-blue in its terminal half, whitish along the edges, the basal portion being horny bluish black; feet a dull burnt carmine.

Dimensions: Total length, according to Mr. Namiye's measurement of the fresh bird, 405^{mm}; stretch of wings, 645^{mm}. Wing, 211^{mm}; tail-

feathers, 153mm; graduation of tail, 24mm; exposed culmen, 21mm; tarsus, 28mm; middle toe with claw, 37mm.

Treron permagna is the second species of the Green Pigeons known to occur in Japan, the other species being the well-known *T. sieboldii.** The two species may be easily distinguished thus:

a^1 Lower breast and entire abdomen yellowish-white; the outer tail-feathers above with a subterminal black band ..... *T. sieboldii.*

a^2 The yellowish white of the body confined to the middle portion of the lower abdomen and the crissum; the tail-feathers without any subterminal cross-band ..... *T. permagna.*

A close ally of *T. sieboldii* is found in Formosa, viz, Swinhoe's *T. sororius*†, if, indeed, it really be separable. It would be interesting to know how the corresponding bird from the intermediate islands is colored.

Megascops elegans (CASSIN).

This species is not new to the Japanese fauna, for the type was taken on board a vessel while in Japanese waters, west of the northern islands of the Linschoten group, consequently not far from the locality where it has now been rediscovered by Mr. Namiye, who obtained a female specimen at Oroku, Okinawa Shima, March 28, 1886.

In order to determine this specimen I went to Philadelphia, where, by the courtesy of the authorities of the Academy of Natural Sciences, I was permitted to institute a direct comparison with Cassin's type of "*Ephialtes elegans.*" I found, as I had anticipated, that the bird collected by Mr. Namiye is identical with the type, agreeing as it does very closely both in size and coloration. It is slightly more rufous all over, but otherwise it matches it so closely, and especially in the amount of feathering on the tarsi, that two specimens more similar are scarcely found in any of the species of this variable group. The type specimen has hardly any indication of occipital or cervical bands and certainly less than several specimens of *M. japonicus* now before me. The Liu Kiu specimen shows more of a cervical light band, though it is by no means very pronounced. It seems not justifiable to refer the present species to *M. lettia* and *M. japonicus* to *M. scops* as subspecies because of the absence or presence of these bands, which apparently are quite an unstable character.

The present species is certainly very closely allied to *M. japonicus*, from which it is easily separated, however, by its superior size and by the greater extent of the naked portion of the tarsus. The coloration is very much the same, the individual variation being almost endless, but it seems as if *M. elegans* has the blackish markings on the top of the head larger and darker, thus making the crown conspicuously darker than the rest of the upper parts; a feature which I do not find in any specimen of my series of *M. japonicus*. The ear-tufts seem to be larger

Columba sieboldii TEMMINCK, Pl. Color., IV, liv, 93, pl. 549. (1835.)

†Ibis, 1866, p. 311=*Treron sonorius* GRAY, Hand-l. B., II, p. 224 (1870.)=*Sphenocercus formosæ* SWINHOE, Ibis, 1866, p. 122, nec *Treron formosæ* SWINHOE, 1863!

than in the latter species, the largest feathers in both specimens of *M. elegans* being 27^{mm} long, besides being rather stiff and narrow, while in the specimen of *M. japonicus*, in which they are best developed (U. S. Nat. Mus., No. 96395), they are only 17^{mm} long, and at the same time less markedly differentiated from the other feathers. The coloration of these tufts, too, is more pronounced in *M. elegans*, their inner webs being more rusty and less mottled with dusky, while the outer webs are more heavily marked with blackish.

The original label attached to the type specimen of *M. elegans* reads as follows: "En Mer. Côtes du Japon. Lat. 29° 17′ 00″ N. Long. 126° 13′ 30″ E. Mardi 2 Avril 1850. Yeux jaune serin," and on the under side of the stand is written: "Eph. affinis. Verr. Mss. Japan, J. B. W.," and with lead-pencil, in Mr. Cassin's handwriting: "E. elegans Cassin."

Whether this bird is the same as *E. glabripes* of Swinhoe, as supposed by Mr. Sharpe (Cat. B. Brit. Mus., II, p. 87), I cannot say with absolute certainty without a specimen of the latter, the more so since his description does not specially mention the amount of feathering on the tarsus, which in *M. elegans* is very much less than in *M. lettia*, of which Mr. Sharpe makes it a subspecies. If *glabripes* has the character assigned to "*lettia* and allies" on p. 46, viz, "tarsi plumed to the base of the toes, the feathering running some way down the middle and outer toes, so that the junction with the tarsus is always hidden," then *elegans* is a bird *toto cœlo* different from that described by Swinhoe, for the distance between the feathering of the tarsus and the junction of the toes with the tarsus is more than 5^{mm} in both specimens of *M. elegans*. Sharpe also describes the nuchal and cervical bands of the Chinese specimens as much more distinct than found in my birds. On the whole I feel greatly inclined to doubt the identity of *elegans* and *glabripes*.

The individual variation in coloration of these owls being so enormous, the following description does not enter into any considerable detail, only such points, being taken in as are deemed essential.

♀ ad. (*Oroku, Okinawa Shima; March* 28, 1886. *Coll. M. Namiye*).—Ground color of upper surface russet fading into Isabella-color on the wings, and strongly tinged with ferruginous on crown and cervix, and with hazel on the rump, all over minutely mottled with dusky, especially dense along the shafts, the feathers on the middle of the crown being nearly black with irregular ferruginous spots, while on some of the feathers of the hind-neck the dusky mottlings are crowded into irregular bars towards the tip, leaving the basal and central portion nearly spotless, thereby forming a faintly indicated tawny band across the cervix; most of the outer scapulars have the outer webs white, slightly marked with tawny and with one or more large blackish spots at the tip, thus forming a narrow longitudinal whitish bar on the shoulders; two or three of the middle wing-coverts have also a large whitish spot, more or less tinged with tawny, in the outer web; ear-tufts long, each feather more or less solid blackish in the outer web and ferruginous

tawny in the inner, only the tips of the latter being mottled with dusky; face whitish mottled with dusky and slightly tinged with tawny, all the dusky mark being bordered with tawny; a blackish semilune limits the auricular region posteriorly; ground color of the entire under surface, except the legs, white with minute and delicate transversal dusky bars, each of which are very narrowly edged with tawny; near the middle line of the body from the breast backwards the feathers are nearly immaculate in the inner webs, forming a whitish median line; the dusky mottlings join at the shafts of the feathers, covering throat and sides so as to form more or less conspicuous shaft streaks; basal portion of all the feathers strongly tinged with tawny, which is quite conspicuous on throat, foreneck, and sides; feathers of tibæ and tarsi pale tawny, each feather with a subterminal dusky bar; axillaries nearly uniform whitish with a very pale tawny wash, under-wing coverts being colored more like the legs; remiges and great wing-coverts dusky with more or less distinct cross-bars of a dull cinnamon buff, which on the basal half of the outer web of the second, third, and fourth primaries becomes nearly whitish; in the inner webs the brownish bands are more or less mottled with dusky, while in the outer webs the dusky interspaces are similarly mottled with the same color as the light bands; tail-feathers colored similar to the wing-feathers, but the light cross-bars are proportionally narrower and less well defined, especially towards the tip, their number on the middle pair being about ten. Bill and feet, in the dried state, dark horn blue, the former with the extreme tip whitish.

Lower part of tarsus naked for a distance of 6mm. First primary slightly shorter than sixth; second intermediate between fourth and fifth; third and fourth equal and longest. Inner webs of first, second, and third primaries abruptly sinuated; outer webs of second, third, and fourth gently sinuated.

The dimensions are included in the following:

Comparative table of measurements.

1. MEGASCOPS ELEGANS.

Museum and No.	Collector and No.	Sex and age.	Locality.	Date.	Wing.	Tail feathers.	Bill from nostrils.	Tarsus.	Middle toe, without claw.	Total length.	Remarks.
Philada. Acad..	.....	ad.	29° 47′ N. lat.; 126° 13′ 30″ E. long.	Apr. 2, 1850	172	78	12	30	20	...	Type.
Educ. M., Tokio	Namiye.....	♀ ad.	Oroku, Okinawa Shima.	Mar. 28, 1886	166	75	12	30	22	210	Stretch of wing, 585.

2. MEGASCOPS JAPONICUS.

U.S. Nat. 96398.	Ringer, 182....	♂ ad.	Nagasaki, Kiusiu.	June 10, 1881	148	63	10	23	18	...	
Do. 96397.	Blakist., 2295 .	♂ ad.	Hakodadi, Yesso.	Sept. 16, 1877	139	64	9	25	19	...	
Do. 96395.	Blakist., 2076 .	♂ ad.	.....do	Sept. 19, 1876	147	67	9	24	18	168	
Do. 96396.	Blakist., 2077 .	♀ ad.	.....do	Sept. 19, 1876	145	70	10	25	18	175	
Do. 96394.	Blakist., 1514 .	♀ ad.	.....do	Sept. 20, 1874	145	65	9	..	....	---	

Motacilla melanope PALL.

A male of this species collected at Napa, March 9, 1886, differs in no way from other Japanese specimens except in having a rather strong wash of green on the interscapilium. The throat is mixed white and black, the feathers of the latter color still partly in their sheaths. The tail-feathers are also moulting.

Total length, 190^{mm}; stretch of wings, 260^{mm} (according to the label). Wing, 83^{mm}; exposed culmen, 12^{mm}; tarsus, 21^{mm}; middle toe, with claw, 18^{mm}.

Hypsipetes pryeri, sp. n.

DIAGN.—Similar to *H. amaurotis* TEMM., but somewhat smaller, with a broad (about 12^{mm}.) collar of burnt umber brown across the throat, uniting the ear-patches, and with the gray of the under parts replaced by raw umber; top of head darker, and rest of upper surface more olivaceous.

TYPE.— ♀ collected by M. Namiye at Napa, Okinawa Shima, March 8, 1886.

HABITAT.—Okinawa Shima, Liu Kiu Islands, Japan.

This new species, which I take a pleasure in dedicating to Mr. Pryer in recognition of his meritorious work in Japanese ornithology, is quite distinct from the common Brown-eared Bulbul of Japan, and may at once be distinguished from this species by the characters given in the above diagnosis.

In some respects it comes nearer to the Bonin Shima bird, *H. squamiceps* KITTL., which sometimes, though, as shown by Dr. A. B. Meyer (Zeitsch. Ges. Ornith., I, 1884, p. 211), quite erroneously, has been considered identical with the common Japanese bird. Dr. Meyer is not correct, however, when asserting that the latter is materially inferior in general size, for, as shown by the table of dimensions given below, the average size of *H. amaurotis* is considerably larger than the measurements given by him. Unfortunately the only specimen of the Bonin bird at my command is in a very poor condition, but then there are two good plates by Kittlitz, and the comparative description by Dr. Meyer, quoted above, which will assist us in pointing out the features by which it differs from *H. amaurotis* proper and from *H. pryeri*.

It is then evident, both from Dr. Meyer's measurements and my own, that *H. squamiceps* has a comparatively longer tarsus than either of the two other species; it furthermore possesses a broad dusky pectoral band, very well represented in the original figure (Mém. Sav. Etr., I, pl. xvi), and by Dr. Meyer described as a "broad blackish pectoral band not quite continuous in the middle." In having the throat, fore neck, and other under parts brown, and not gray, *H. squamiceps* agrees with *H. pryeri*, but judging from my specimen of the former, this brownish color is of a different tint, less yellowish than in the latter species.

In addition, I should remark that it may later on be expedient to recognize the individuals breeding in Yesso as a distinct race, charac-

terized by the paleness of the flanks and the general lighter tone of the under parts, but at present, with only two specimens from that island, I refrain from naming it. I may also mention that a specimen from Tate-Yama, collected by Jouy, October 28, agrees with the Yesso birds. This would not invalidate the status of the latter as a distinct race, since it may be presumed that in winter or during the migrations it may occur in Hondo, especially on the western side. Additional specimens from Yesso are therefore very desirable, in order to have the question settled.

A specimen from Chusan, China (U. S. Nat. Mus., No. 85685), acquired by Mr. Jouy at the Shanghai Museum, differs in no essential from the typical Japanese *H. amaurotis*.

Comparative table of measurements.

1. HYPSIPETES PRYERI.

Museum and No.	Collector and No.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Exposed culmen.	Tarsus.	Middle toe, with claw.	Total length.
.....	Namiye.....	♀ ad.	Napa, Okinawa	Mar. 8, 1886	115	109	21	23	20	270

2. HYPSIPETES SQUAMICEPS.*

U. S. Nat. 21163..	Stimpson	.....	Bonin Islands	Oct. —, 1854	125	118	..	26	26	...

*In regard to the measurements of this specimen, I may state that those of wing and tail feathers are probably too low, owing to the poor condition of the feathers.

3. HYPSIPETES AMAUROTIS.

Museum and No.	Collector and No.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Exposed culmen.	Tarsus.	Middle toe, with claw.
U. S. Nat. 96279	Ringer, 21.....	♂ ad.	Nagasaki, Kiusiu	Jan. 1, 1877	128	115	24	22	23
Do. 109346	Namiye.....	♂ ad.	Sagami, Hondo	Nov. 15, 1884	133	120	24	22	....
Do. 88664	Jouy, 502	♂ ad.	Fuji, Hondo	July 13, 1882	130	119	26	21	23
Do. 96280	Blakist., 2154..	♂ ad.	Hakodadi, Yesso.....	Feb. 12, 1877	136	120	....	22	23
Do. 109347	Namiye.....	♀ ad.	Sagami, Hondo	Nov. 15, 1884	123	112	....	22	22
Do. 91325	Jouy, 729	♀ ad.	Tate-Yama, Hondo ...	Oct. 28, 1882	127	111	22	23	24
Do. 96281	Blakist., 2873..	♀ ad.	Mororan, Yesso.....	May 16, 1882	127	112	23	21	22
Do. 85685	Jouy, 115	♂	Chusan, China.....	Feb. 23, 1875	130	121	25	22	23

ICOTURUS, gen. nov.

(εἰκός, εἰκότος = reasonable.)

Of the family *Timaliidæ*, as defined by Mr. R. B. Sharpe (Cat. B. Brit. Mus.).

Bill rather long and slender, slightly hooked and notched at tip; culmen straight to near the tip; gonys slightly convex, equal in length to the distance from nostrils to tip; nostrils at the anterior end of the

nasal groove overhung by the membrane, oval and slightly oblique, and removed from the feathering a considerable distance; bristles at base of upper mandible tolerably well developed.

Wings short, rounded, and very concave; distance of secondaries from tip of longest primary less than the length of the exposed culmen.

Tail much shorter than wing, slightly rounded.

Feet long; tarsus nearly twice as long as exposed culmen, rounded behind, booted; toes long and slender, outer toe longer than inner; hind toe long, with a strong curved claw.

TYPE.—*Icoturus namiyei* STEJNEGER.

The other species belonging to this genus is *Icoturus komadori* (=Temmenick's *Sylvia komadori*, =*Erithacus komadori* of Seebohm in Cat. B. Mus. V.). So far as I can see, these birds have nothing to do with the *Turdinæ*, *Luscinilnæ*, or whatever that group may be called, which includes the English Robin. The very concave wing apparently at once removes them from that neighborhood and suggests "Timaliine" relationship. Another character by which *Icoturus* differs from the true robins is the remoteness of the nostrils from the frontal feathering, thereby also indicating relationship with "Timaliine" forms. True, the tarus is booted, but, I think, in a somewhat different way from that of the *Turdidæ*, and resembling that of the *Enicuridæ* (Stejneger, in Stand. Nat. Hist., IV, p. 489, 1885), in being rounded behind and not sharply edged. In fact, I cannot see that it differs from the "aberrant Timaliine group" *Enicuri* (or *Henicuri*, Sharpe, Cat. B. Brit. Mus., VII, pp. 312–323), except by the shape of the tail being slightly rounded instead of furcate. The shape of the bill is identical; the wing rather *more* "Timaliine"; and the tarsus and toes indistinguishable from the corresponding parts in the *Enicuri*. As to the tail it should be remarked, that in the latter group its shape varies greatly from the deeply forked and very long tail of *Enicurus* proper to the nearly square and short tail of *Microcichla*, from which there is only a very short step to the slightly rounded tail of *Icoturus*. Even in style of coloration the difference is not very great*, as considerable similarity will be found between *Icoturus* and *Hydrocichla ruficapilla* (TEMM.), especially in the coloration of the anterior part of the body. Unfortunately the first plumage of the *Icoturi* is not known, as that might go a long way in settling the question of their true relationship.

Icoturus namiyei, sp. nov.

DIAGN.—Similar to *I. komadori* TEMM., but with the flanks and axillaries uniform ashy, and the under wing-coverts ashy and rufous; second primary equals the ninth, much shorter than the eighth; third shorter than fourth, fifth, and sixth, which are longest.

* In coloration, however, the *Icoturi* very forcibly remind one of certain Formicariidæ. Should color count for more than structure, then *Icoturus* would come very close to *Myrmeciza longipes*, from Panama, to which it has a most astonishing superficial resemblance.

TYPE.—U. S. Nat. Mus., No. 109474.

HABITAT.—Liu Kiu Islands.

The type of the present species, which I take the pleasure to name after its discoverer, was collected by Mr. Namiye, at "Nagogatake, Liu Kiu," apparently the same as Nago Take of Hassenstein's map, a mountain in the northern part of Okinawa Shima.

Icoturus namiyei is evidently closely related to *I. komadori*, but the differences are so strongly marked that I feel no hesitation in describing it as a distinct species, although having no specimen of the latter at hand for direct comparison. The specimen before me is undoubtedly a male in full adult plumage, so the differences cannot be due to age or season, the more so as the proportions also seem quite different. I take Seebohm's description of the type specimen of *I. komadori* (Cat. B. Brit. Mus., v, p. 298) to be correct, and shall now give in tabular form the characters by which *I. namiyei* differs from that description:

I. namiyei ♂ ad.	*I. komadori* ♂ ad.
Flanks uniform ashy gray.	"Flanks black; the feathers of the * * * upper flanks margined with white. * * *."
Under wing-coverts ashy gray, the outer webs and the tips margined with rufous orange, similar to the color of the back.	"Under wing-coverts black, margined with white."
Axillaries uniform ashy gray.	"Axillaries white, with dark centers."
Bastard primary, 26.5^{mm}.	"Bastard primary, 0.8 inch" (=20.3^{mm}).
Length of wing, 72^{mm}.	"Length of wing, male, 2.9" (=73.7^{mm}).
Longest tail-feathers, 52^{mm}.	"Tail, male, 1.9" (=48.3^{mm}).
Tarsus, 29^{mm}.	"Tarsus, 1.02" (26^{mm}).
Wing with the fourth, fifth, and sixth primaries nearly equal and longest; second primary about equal to the ninth.	"Wing with the third, fourth, and fifth primaries nearly equal and longest; second primary about equal to the sixth."

It will be seen that *I. namiyei* has the wing much more rounded, with a longer first primary, and that while the other dimensions are nearly the same, the tarsus is proportionately longer. I have not introduced the length of the culmen in the above comparison, as I do not know how Mr. Seebohm measures it. The culmen is given by him as 0.68 inch (=17.3^{mm}); the "exposed culmen" of my bird is 14^{mm}, but from the extreme cranial base the culmen measures 19^{mm}, both measurements differing considerably from Mr. Seebohm's. I may also remark that Mr. Seebohm describes the "rest of the under parts" (except chin, throat, breast, and flanks) as "white," while in my bird the tibiæ are ashy strongly suffused with rufous, and the under tail-coverts pale rusty.

DESCRIPTION.—♂ ad. (*U. S. Nat. Mus. No.* 109474; *Nagogatake, Liu Kiu, March* 21, 1886. *Coll. M. Namiyie*).—Entire upper side, including wing-coverts, tail-coverts, and rectrices beautiful orange rufous, deepest on top of head, lightest on the ear-coverts; in the middle of the forehead the rufous goes clear to the bill, but the sides of the forehead are jet black like the lores, the anterior part of the supercilium, cheeks, chin, throat, fore neck, and upper breast, the posterior outline of the black on the sides of the upper breast being as abrupt and well defined as in the middle; sides of body (the whole region covered by the folded

wings) and the axillaries uniform ash gray, the latter slightly lighter; lower breast, abdomen, and crissum white, towards the sides washed with ashy; tibial feathers ashy suffused with rufous; under tail-coverts pale rusty; exposed portion of the remiges of a color similar to that of the back, but inclining to burnt umber; inner webs dusky with pale rusty edges. Bill jet black; legs horny, brownish gray. Total length, according to Mr. Namiye, 152^{mm}, and stretch of wing 241^{mm}. Wing, 72^{mm}; tail-feathers, 52^{mm}; exposed culmen, 14^{mm}; tarsus, 29^{mm}; middle toe with claw, 23^{mm}; graduation of tail, 5^{mm}.

Turdus naumanni TEMM.

An adult male, differing in no way from typical specimens of the Red-tailed Thrush, was collected in Oroku, Okinawa Shima, March 28, 1886. The total length is given as 240^{mm}; stretch of wing, 400^{mm}. Wing, 130^{mm}; tail-feathers, 89^{mm}; exposed culmen, 17^{mm}; tarsus, 32^{mm}; middle toe with claw, 27^{mm}.

Monticola solitaria (MÜLL.).

An adult female from Napa, Liu Kiu, March 5, 1886 (U. S. Nat. Mus. No. 109473), in the gray plumage. This species was also collected at Napa by the Rodgers Expedition, during the winter 1854–1855. A male in chestnut plumage is in the collection of the U. S. National Museum (No. 21146).—*Cf. Petrocossyphus manillensis*, Cassin, Proc. Acad. Phila. 1862, p. 314.

Ianthia cyanura (PALL.).

A male in the olive plumage was collected at Nagogatake, Liu Kiu, March 16, 1886 (U. S. Nat. Mus. No. 109475).

Chelidon namiyei, sp. n.

DIAGN.—Similar to *Chelidon javanica* (SPARRM.), but considerably larger, with the gloss of the upper surface more greenish, and the gray of the under side purer; under tail-coverts margined with pure white.

TYPE.—Coll. Namiye, Urassoimagiri, Okinawa Shima, Liu Kiu Islands, March 11, 1886.

HABITAT. Liu Kiu Islands, Japan.

Tested by Mr. Sharpe's "Key" to the species of this genus (Cat. B. Brit. Mus., x, p. 124), the present species would have to be sought for in the section embracing "*rustica* and allies," viz, *savignii*, *gutturalis*, *erythrogastra*, and *tytleri*, as far as length of wing is concerned, it being about 4.60 inches in *Ch. namiyei*. It must be compared, however, with the species following, which have the "wing extending beyond the tips of tail," and "no band on the fore neck," especially those with white spots on the tail-feathers and with the under tail-coverts "smoky brown."

Chelidon namiyei is at once distinguished from *Ch. neoxena* by the much shallower furcation of the tail, it being about 20^{mm} deeper in the Australian species, which, in fact, has the tail nearly as furcate and the outer tail-feathers quite as attenuated as *Ch. gutturalis*.

Our new species is much nearer related to *Ch. javanica*, from which, however, it differs not only in size, being, as it is, considerably larger, but also in coloration. The gloss of the upper surface is more greenish; the brown of the throat is more chestnut; the gray of the under parts deeper and less tinged with rusty; the under tail-coverts darker and tipped with pure white margin not tinged with rusty, as in the Javan bird. It should be remarked, however, that in the unsexed specimen in the Philadelphia Academy, these tips are nearly white. The tail of the present species is somewhat more furcate, but in spite of this, the outer rectrices are less attenuated at the tip.

The following description of the type specimen is appended for the sake of completeness.

♂ *ad.* (*Urassoimagiri, Okinawa Shima, Liu Kiu, March* 11, 1886. *Coll. M. Namiye*). Above, except forehead and anterior portion of crown, black with a strong gloss of steel-blue, somewhat inclining to greenish; forehead and anterior half of the crown deep chestnut, the feathers of the latter being bluish black in the center; lores deep velvety black; cheeks and lower ear-coverts, chin, throat, and fore neck bright tawny hazel inclining slightly to cinnamon, and becoming somewhat lighter towards the breast; upper half of the ear-coverts, sides of neck bluish black, like the back, this color descending on the side of the breast, forming a distinct semilune on each side, which partly separates the hazel of the neck from the rest of the under surface, which is of a nearly pure drab, each feather near the middle line of the body broadly though not very distinctly margined with whitish, the under tail-coverts gradually becoming blackish towards the tip, which is broadly and distinctly margined with white; under wing-coverts and axillaries of a drab color similar to that of the breast, but darker; wings and tail above black with a faint gloss of steel green; the tail-feathers, except the middle pair, with an oblique oval white spot in the inner web towards the tips, those on the outer pair being the smallest.

Total length, according to Namiye, 145^{mm}; stretch of wings, 325^{mm}. Wing, 118^{mm}; longest tail-feathers, 58^{mm}; furcation of tail, 14^{mm}; exposed culmen, 8.5^{mm}; tarsus, 10^{mm}; middle toe with claw, 15^{mm}.

In order to better show the differences in size and proportions between the present species and its two nearest allies I append the following

Table of comparative measurements.

1. CHELIDON NAMIYEI.

Museum and No.	Collector and No.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Exposed culmen.	Tarsus.	Middle toe, with claw.	Furcation of tail.
Tokio Educat. Mus...	Namiye.....	♂ ad.	Urassoimagiri, Okinawa.	Mar. 11, 1886.	118	58	8.5	10	15	14

Table of comparative measurements—Continued.

2. CHELIDON JAVANICA.

Museum and No.	Collector and No.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Exposed culmen.	Tarsus.	Middle toe with claw.	Furcation of tail.
Philad'a. Acad., $\frac{3}{4}\frac{5}{5}$	Verreaux	♂ ad.	Java		102	48	...	..	....	10
Do	do	.....	"Coupang", Java		99	46	...	..	....	7

3. CHELIDON NEOXENA.

Philad'a. Acad	Gould, 1047	♂ ad.	Rottnest Isl., Austr.		117	78	7	..	....	34
Do	Gould, 1048	♂ ad.	W. Austr.		117	78	...	..	....	34
Do	Gould, 1049	♂ ad.	V. Diem. Land		111	76	...	..	....	36
Do	Gould, 1050	♀ ad.	do		108	71	...	..	....	28

Ampelis japonicus (SIEB.).

A male, collected in Liu Kiu, March 26, 1886 (U. S. Nat. Mus., No. 109477), is identical with specimens from Japan proper. Its total length, as given on the label, is 187mm; stretch of wing, 330mm.

Pericrocotus tegimæ, sp. nov.

DIAGN.—Similar to *P. cinereus*, but with a very broad and distinct pectoral band of a dark ashy, and without light edges or margins to the remiges and their upper coverts: tertiaries uniform blackish in both webs.

TYPE.—U. S. Nat. Mus., No. 109476.

HABITAT.—Liu Kiu, Japan.

The discovery of this very distinct species of *Pericrocotus* is most interesting, and it affords me great pleasure to dedicate it to the distinguished director of the Educational Museum at Tokio, Mr. S. Tegima, to whose zeal we are indebted for many of our most important accessions.

Two specimens, both males, collected March 11 and 12, 1886, by Mr. Namiye, on Okinawa Shima, agree in every particular and prove beyond doubt the great distinctness of the form.

Two adult males of the so-called *P. cinereus*, from the Main Island of Japan, are also in the collection, affording good material for comparison with a male collected by Mr. Jankovski in Ussuri. A specimen of the nearly allied *P. cantonensis* is also at hand.

The first result of a careful comparison is, that the male Japanese birds differ from the Ussuri specimen in the following points:

1. The black on head and upper neck also occupies the upper interscapilium, not contrasting so abruptly with the ashy of the back, which, besides, is darker and more blueish.

2. The bill and feet are proportionately larger.

I shall designate the Japanese bird as *Pericrocotus japonicus* (Type U. S. Nat. Mus., No. 109349), taking the mainland bird to be the true *P. cinereus*. This name, however, was based on a female from the Philippine Islands, consequently on a bird with gray head, and it is, therefore, impossible to determine from his description whether the name belongs to the Japanese or the Continental form, the more so since he gives no other measurements than those of total length and tail. A direct comparison with the type will be necessary to settle the question beyond doubt. In the meantime I feel justified in retaining *P. cinereus* for the form which has been so designated by most writers, and especially by Mr. R. B. Sharpe in his valuable Catalogue of Birds in the British Museum (vol. IV, pp. 83, 84).

Pericrocotus tegimæ, as the following comparison with *P. cinereus* and *P. japonicus* will show, is, perhaps, the most distinct and best-defined species of the group containing the gray *Pericrocoti*. It will be observed that only such characters have been included in the above diagnosis, which probably apply to the females as well as to the males.

The males of *P. tegimæ* differ from the males of *P. cinereus* and *P. japonicus*:

(1) By having the whole crown bluish black, only leaving a narrow white band on the forehead and a short superciliary stripe white, while in the two last-named forms the white covers the whole forehead and anterior half of the crown.

(2) By the bluish black of the upper head and neck not ending abruptly, but gradually becoming lighter backwards over all the upper parts which are much darker than in any of the allied species.

(3) By having the entire upper surface of the wing uniform blackish, with the exception of a small but well defined white speculum at the base of the outer secondaries, while the other forms have the bases of the primaries and secondaries as well as the outer webs of the tertiaries ashy, and the latter margined with more or less white, while all the coverts, except primary coverts, are bordered with gray.

(4) By possessing no trace of the white speculum on the outer web of the sixth primary.

(5) By having the lower fore neck and upper breast dark ashy, in strong contrast with the white of the throat, upper fore neck, and middle lower breast and abdomen, while in the allied forms the whole under surface is pure white.

(6) By having the under side of the shafts of the four central tail-feathers black, these being white in *P. cinereus* and *P. japonicus*.

(7) By having comparatively much shorter wings than either of the two other forms.

In view of this comparison, extending over nearly all the essential parts, a detailed description of *P. tegimæ* is deemed unnecessary in the present connection. I may remark that both specimens are precisely alike, except that in the specimen now in the U. S. National Museum

(the type) the white on the forehead is somewhat broader, it being only a very narrow line in the one sent for examination.

Comparative table of measurements.

P. TEGIMÆ.

Museum and No.	Collector and No.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Exposed culmen.	Bill from nostril.	Tarsus.	Middle toe, with claw.	Total length.	Culmen to extreme base.
U.S. Nat. 109476	Namiye	♂ ad.	Liu Kiu	Mar. 11, 1886	87	96	12	10	16	16	...	18
.....	....do	♂ ad.	Chatanmagiri, Okinawa.	Mar. 12, 1886	83	96	13	10	15	17	200	18

P. JAPONICUS.

U.S. Nat. 109349	Namiye	♂ ad.	Amagi, Idzu	May 1, 1885	99	95	12.2	9.5	16	18	...	18.5
U.S. Nat. 109348	....do	♂ ad.	....do	May 6, 1885	100	101	12.5	10	16	19	...	18.5
U.S. Nat. 88656	Jouy, 387	♀ ad.	Fuji	July 2, 1882	96	95	12	9.75	16	17	...	18
U.S. Nat. 91382	Jouy, 628	♂jun.	Chusenji Lake	Aug. 27, 1882	96	96	12	9	15	17	...	18

P. CINEREUS.

U.S. Nat. 108892	Jankovski, 1765	♂ ad.	Sidenij, Ussuri	May 13, 1884	95	91	11	8	14	16	...	16

Parus castaneoventris GOULD.

A female apparently belonging to this form, originally described from Formosa, and hitherto only known from that island, was collected at Nagogatake March 16, 1886. It is smaller than typical *P. varius*; it has only a few rufous feathers adjoining the black of the hind neck instead of a large triangular spot; and the creamy spot just behind the black of the fore neck is only faintly indicated. The flanks are also considerably paler than in the Hondo bird. Unfortunately I have no Formosa skin to compare it with, but in the points referred to it agrees with the descriptions of Gould and Swinhoe. The dimensions, however, are slightly in excess of those given by these authors, being, in fact, intermediate between typical birds of both species.

Comparative table of measurements.

PARUS VARIUS.

Museum and No.	Collector and No.	Sex and age.	Locality.	Date.	Wing.	Tail-feathers.	Exposed culmen.	Tarsus.	Middle toe, with claw.	Total length.
U.S. Nat. 91344	Jouy, 831	♂ ad.	Tate Yama, Hondo	Dec. 3, 1882	76	54	12	20	20	...
U.S. Nat. 91343	Jouy, 827	♀ ad.	.....do	Dec. 1, 1882	79	54	11	20	20	...
U.S. Nat. 109353	.....	♀ ad.	Amagi, Idzu	May 2, 1885	72	48	11	19	18	...

PARUS CASTANEOVENTRIS.

U.S. Nat. 109478	Namiye	♀ ad.	Nagogatake, Liu Kiu	Mar. 16, 1886	67	48	12	19	17.5	127

Spinus spinus (LIN.).

A pair collected at Napa, March 5 (U. S. Nat. Mus., Nos. 109479, 109480), concludes the list of species which were sent from these interesting islands.

Of this species I have only two more Japanese male birds for comparison with eight European males. In the former the black cap seems to reach further down on the hind neck than in the western birds. Additional Japanese specimens are, therefore, desirable, as with the present series I do not feel justified in separating the eastern bird.